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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,988	08/22/2003	Darius D. Gaskins	CNTR.2209	1141
23669	7590	10/18/2006	EXAMINER	
HUFFMAN LAW GROUP, P.C. 1900 MESA AVE. COLORADO SPRINGS, CO 80906			CONNOLLY, MARK A	
			ART UNIT	PAPER NUMBER
			2115	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/646,988

Applicant(s)

GASKINS ET AL.

Examiner

Mark Connolly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/3/06 & 6/24/06.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-22 have been presented for examination.
2. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mittal<sup>1</sup> in view of Lippert et al [Lippert] US Pat No 7017061.
5. Referring to claim 1, Mittal teaches the apparatus substantially including:
  - a. a plurality of functional units each including a corresponding plurality of activity outputs, for indicating when a respective functional unit is enabled [figs. 1 and 5].
  - b. utilization assessment logic, coupled to said plurality of activity outputs, for assessing activity thereof to determine a current total power consumption value for the microprocessor [col. 5 lines 30-42 and col. 11 lines 54-58].
  - c. power control logic, coupled to said utilization assessment logic, for comparing said current total power consumption value with a threshold power value included in a specified power profile [col. 5 lines 30-42 and col. 11 lines 54-58].

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<sup>1</sup> As cited in the previous office action

d. a power consumption controller, coupled to said power management logic and said plurality of functional units, for engaging one of a plurality of power reduction modes if said current total power consumption value exceeds said threshold power value [abstract and col. 5 lines 25-29].

Although Mittal teaches a specified power profile, it is not explicitly taught that the specified power profile is selected from a plurality of power profiles stored within the power control logic. Lippert explicitly teaches a means for selecting a power profile from a plurality of preset profiles, which include a threshold power value [col. 4 lines 8-35 and 46-59]. It would have been obvious to one of ordinary skill in the art to include a plurality of power profiles from which to select from as taught by Lippert into the Mittal system because it provides a means to regulate power consumption during a battery operation mode, wherein available power decreases over time, thus preventing inadvertent shutdowns of the processor due to excess power consumption from a discharging battery [col. 4 lines 35-43].

6. Referring to claims 2-6, applicant(s) numerous definitions of a "functional unit" (claims 2-6) is construed to be an admission that the criticality does not reside in the type of "functional unit" utilized and hence obvious variations of one another. Mittal explicitly teaches a functional unit as being a functional unit as being a cache [col. 7 lines 43-50, col. 10 lines 52-59 and col. 11 lines 54-58]. Not accessing a cache is interpreted as disabling the usage of the cache. In addition, Mittal teaches that branch predictors and floating point units also consume substantial amounts of power just like cache memories [col. 2 lines 25-31 and col. 3 lines 5-8]. Furthermore, Mittal teaches reducing the rate of instructions [col. 3 lines 14-17]. It is interpreted that the instructions would be issued to an execute unit.

7. Referring to claims 7 and 8, Mittal teaches reducing a voltage and/or clock frequency [col. 5 lines 1-4].
8. Referring to claim 9, this is rejected on the same basis as set forth hereinabove. Furthermore, Mittal teaches assessing the activity of individual functional units [fig. 5 and col. 11 lines 38-39 and 54-58].
9. Referring to claim 10, Mittal teaches a control bus coupled between power management logic and power consumption controller [109 fig. 1A and 507, 508 fig. 5].
10. Referring to claims 11 and 12, Mittal teaches sending commands over a control bus to instruct power consumption controller to control the power consumption of either an individual functional unit or all functional units [col. 11 lines 21-32 and col. 12 lines 28-41].
11. Referring to claim 13, this is rejected on the same basis as set forth hereinabove.
12. Referring to claim 14, this is rejected on the same basis as set forth hereinabove. Mittal teaches the apparatus and therefore teaches the method performed by the apparatus. In addition, Mittal further teaches prescribing a power profile to the device [col. 5 lines 43-61].
13. Referring to claims 15-22, these are rejected on the same basis as set forth hereinabove.

### *Conclusion*

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Connolly whose telephone number is (571) 272-3666. The examiner can normally be reached on M-F 8AM-5PM (except every first Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark Connolly  
Examiner  
Art Unit 2115

mc  
October 3, 2006

